REMARKS

In the Office Action mailed October 25, 2007, the Examiner noted that claims 1-19 were pending and rejected claims 1-19. Claims 1, 7, 15 and 17 have been amended, claim 2, 8, 16, 18 and 19 have been canceled without prejudice, new claim has been added 20; and, thus, in view of the foregoing claims 1, 3-7, 9-15, 17 and 20 remain pending for reconsideration which is requested. No new matter is believed to have been added. The Examiner's rejections are respectfully traversed below.

Rejections under 35 U.S.C. § 112

On page 3 of the Office Action, claims 2, 8, 16 and 18 were rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. It is respectfully submitted that the rejection is considered to be moot because claims 2, 8, 16 and 18 have been cancelled without prejudice. Accordingly, withdrawal of the rejection is respectfully requested.

Rejections under 35 U.S.C. § 102 and § 103

On page 4 of the Office Action, claims 1, 3-5, 15, 17 and 19 were rejected under 35 U.S.C. § 102(e) as being anticipated by Campbell et al. (U.S. Patent Publication No. 2004/003284) (hereinafter "Campbell").

Campbell is directed to a network that detects virus attacks and identifies the source of the attacks in the computer network (see Campbell, paragraph [0001]). According to Campbell, packets are sent to a virus scanner within a network switch for virus signatures or attack patterns when the network switch receives a packet through any port (see Campbell, paragraph [0029]). If a packet contains a virus, the packet is stopped right away by the network switch thereby preventing the virus from spreading to another computer.

Claim 1, however, requires "[disabling] ... transmission of the data outside the hub unit to [all] the communication devices directly connected to the hub unit *other* than a communication device that transmitted the infected data" when the virus detecting unit detects infected data. Campbell does not disable transmission of the data to [all] the communication devices other than the communication device that transmitted the infected data because Campbell disables sending the virus packet to the *intended computer* and does not disable sending the virus packet to *all* the computers.

Further, claim 1 requires that "the virus preventing unit registers a transmission MAC address of a communication device that transmitted the [infected] data to the hub unit" when the virus detecting unit determines that data is infected with a virus. However, nothing was cited or found in Campbell that teaches or suggests the above-mentioned features as recited in claim 1.

In addition, because claim 1 requires that "a transmission MAC address of a communication device that transmitted the [infected] data" be registered, "a virus spreading preventing units" can *disable* "*transmission* of the data outside the hub unit *to [all] the communication devices* directly connected to the hub unit, other than [the] communication device that transmitted the infected data". In Campbell, however, because the data between a network switch and a computer is transmitted in the *upper layer* (e.g. using an IP address of the computer), ports in the network switch cannot be physically blocked. As a result, in Campbell, the infected computer may still send data to other computers via the network switch, thereby potentially infecting other computers in the network, whereas, in claim 1 "transmission of data to [all] communication devices" is disabled, other than the device that transmitted the infected data.

Therefore, in light of the above-mentioned reasons, Campbell fails to teach or suggest "register[ing] a transmission MAC address of a communication device that transmitted the [infected] data", thereby "disabl[ing] transmission of the data outside of the hub unit to [all] the communication devices directly connected to the hub unit," as recited in claim 1. Thus, it is submitted that claim 1 is patentable over Campbell. Further, claims 15 and 17 recite similar features as claim 1 and, therefore, claims 15 and 17 are patentable over Campbell for reasons similar to those discussed above with respect to claim 1.

The dependent claims 3-5 are also patentable over Campbell for at least the same reasons as base claim 1.

On page 5 of the Office Action, claims 2, 7-10, 16 and 18 were rejected under 35 U.S.C. § 102(e) as being anticipated by or, in alternative, under 35 U.S.C. § 103(a) as being obvious over Campbell.

Claim 7 has been amended to recite the following:

> a virus spreading preventing unit that receives a transmission address of a communication device that transmitted data to the hub unit when the virus detecting unit determines that the data is infected with a virus, and disables, when the virus detecting unit detects infected data, transmission of the data to communication devices directly connected to the hub unit, other than a communication device that transmitted the infected data,
>
> wherein said virus spreading preventing unit determines whether or not a transmission MAC address of a communication device, attached to data transmitted from the device, coincides with an address stored in the third memory

unit, when the virus detecting unit determines that the data is infected with a virus and, if it determines that there is a coincidence between the two addresses, it disables transmission of the data to a communication device having the same address.

Therefore, it is submitted that claim 7 is patentable for reasons similar to those discussed above with respect to claim 1.

The dependent claims 9-10 are patentable over Campbell for at least the same reasons as base claim 7.

On page 8 of the Office Action, claims 13 and 14 were rejected under 35 U.S.C. § 103(a) as being obvious over Campbell. Dependent claims 13 and 14 are patentable over Campbell for at least the same reasons as base claim 7.

On page 9 of the Office Action, claims 6 and 11 were rejected under 35 U.S.C. § 103(a) as being obvious over Campbell in view of Togawa (U.S. Patent No. 6,240,530). Claims 6 and 11 are patentable over Campbell for at least the same reasons their respective base claims. Further, nothing was cited or found in Togawa that cures the deficiencies of Campbell as set forth above with respect to claims 1 and 7. Therefore, claims 6 and 11 are patentable over the references.

On page 9 of the Office Action, claims 1, 4-5, 15 and 17 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Yokoyama Masatoshi (Japanese Publication No. 10307776) (hereinafter "Masatoshi") in view of Campbell. In light of the above mentioned discussion, it is submitted that claims 1, 15 and 17 are patentable over Campbell. Further, nothing was cited or found in Masatoshi that cures the deficiencies of Campbell as set forth above with respect to claims 1, 15 and 17. Therefore, claims 1, 15 and 17 are patentable over Masatoshi and Campbell, taken alone or in combination thereof. The dependent claims 4-5 are patentable over Masatoshi and Campbell for at least the same reasons as base claim 1.

On page 11 of the Office Action, claims 2-3, 7-10, 12-14, 16 and 18 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Masatoshi in view of Campbell and further in view of Libenzi (U.S. Patent No. 7,117,533) or alternatively in view of Kim (U.S. Patent No. 6,701,440). It is submitted that nothing was cited or found in Masatoshi, Libenzi or Kim, taken alone or in combination, that cure the deficiencies of Campbell as set forth above with respect to claim 7. Therefore, claim 7 is patentable over Masatoshi, Campbell, Libenzi, and Kim. Further, dependent claims 3, 9-10 and 12-14 are patentable over the references for at least the same reasons as their respective base claims.

On page 14 of the Office Action, claim 6 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Masatoshi in view of Campbell and further in view Togawa. Claim 6 is patentable over Campbell for at least the same reasons as base claim 1. Nothing was cited or found in Masatoshi or Togawa that cures the deficiencies of Campbell as set forth above with respect to claim 1. Therefore, it is submitted that claim 6 is patentable over the references.

On page 15 of the Office Action, claim 11 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Masatoshi in view of Campbell and Libenzi or alternatively in view of Kim and further in view Togawa. Claim 11 is patentable over Campbell for at least the same reasons as base claim 7. Further, nothing was cited or found in Masatoshi, Libenzi, Kim, or Togawa that cures the deficiencies Campbell as set forth above with respect to claim 7. Therefore, it is submitted that claim 11 is patentable over the references.

New Claim

Claim 20 has been added to recite:

20. (New) A method, comprising:
detecting data infected with a virus based on virus patterns stored in a storage unit;
disabling transmission of the data infected with the virus to all computers connected to a network by blocking communication between the network and a computer that transmitted the data infected with the virus based on the MAC address of the computer.

Support can be found on page 9, lines 5-18 and page 12, lines 7-15 of the Specification. It is submitted that the references, taken alone or in combination, fail to teach or suggest the above-mentioned features recited in claim 20. Therefore, claim 20 is patentable over the references.

Summary

In accordance with the foregoing, it is respectfully submitted that all outstanding objections and rejections have been overcome and/or rendered moot. Further, all pending claims patentably distinguish over the prior art. There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

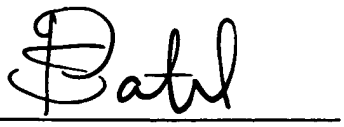
Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

Date: February 25, 2008

By: 

Sheetal S. Patel
Registration No. 59,326

1201 New York Avenue, N.W., 7th Floor
Washington, D.C. 20005
Telephone: (202) 434-1500
Facsimile: (202) 434-1501